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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,851	08/01/2003	Kazutaka Kusano	360842010500	9161
7590 Barry E. Bretschneider Morrison & Foerster LLP Suite 300 1650 Tysons Boulevard McLean, VA 22102		05/29/2007	EXAMINER NILAND, PATRICK DENNIS	
			ART UNIT 1714	PAPER NUMBER
			MAIL DATE 05/29/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/631,851	Applicant(s) KUSANO ET AL.	
	Examiner Patrick D. Niland	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12, and 14 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/19/07 has been entered.

The amendment of 10/6/06 has been entered. Claims 1-12 and 14 are pending.

2. Claims 11-12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The instant claims 11-12 and 14 recite "including an inorganic powder" which is interpreted in its broadest reasonable sense, as is axiomatic in the patent law, as including anything since there is no closed language. Claim 11 then reads "and wherein the content of a foreign substance is 15 mg per 20 kg or less." It is unclear what the boundary is between the things included in the paste by the above mentioned open language and those things which are excluded by "foreign substance" since "foreign substances" are not specifically defined. The scope of the instant claims is therefore unclear.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 11-12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat. No. 6660184 Singh et al..

Singh et al disclose phosphor pastes suitable for application to plasma display panels. Although the reference does not recite a paste production method such as claimed instantly, applicants need show that the process limitations of the rejected claims necessarily produce pastes with patentably distinct properties from the pastes of the reference.

The declaration of Kazutaka Kusano of 3/19/07 has been considered. In view of the above "112" rejection regarding the scope of the instant claims, particularly relating to "foreign substances", it is not seen that the instant claims do not encompass the presence of the "foreign substances" of the declarant. Furthermore, the "foreign substances" are not specifically identified. If they are "inorganic powders" they are specifically encompassed by the instant claims. Thus, it is not seen that the declaration distinguishes the instant claims from the pastes of the cited prior art on at least these two grounds. It is also not seen that the inorganic powders of the instant declaration and those of the patentee began with the same content of foreign substances, which would materially affect the outcome and not be indicative of any unexpected result from the method of making the two pastes. This rejection is therefore maintained.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6, 8-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 6326449 Haldankar in view of JP 11-197479 Susumu (machine translation provided and referenced below).

Haldankar discloses making mill bases using roller mills throughout the entire document, particularly the abstract; column 2, lines 25-29; column 3, lines 42-67; column 4, lines 48-67; column 6, lines 25-38, particularly 25-28, and 43-67; column 12, lines 65-67; column 13, lines 1-1-9, particularly 9 which shows mill base to contain resin, dispersant, and pigment. It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to mix the mill base of Haldankar with the device of Susumu because Haldankar discloses mixing their compositions with roller mills generically, though not the instantly claimed roller mill, and Susumu discloses preparing a mill base, which falls within the scope of paste of the instant claims, using a device falling within the scope of that of the instant claims (see the figures of the instant application and Susumu) and the mixing of Haldankar would have been expected to have the benefits disclosed by Susumu where Susumu's device is used as the roller mill. The last 3 lines of the abstract of Susumu fall within the scope of the instant claim 2. It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to add the liquids to the mixer of Susumu by metering pump because such devices are commonly employed to give known consistent amounts of liquid components to chemical processing apparatus as shown by Haldankar, column 9, lines 65-67 and the benefits of such devices including reproducible usage of the same amounts of components would be expected to be beneficial in the mixing discussed above for reasons appreciated by the ordinary skilled artisan. The figures of Susumu show the structure of the instant claim 4. Susumu is silent regarding the

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dimensions of the instant claim 5. It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the dimensions of the instant claim 5 in Susumu's device because the reference's silence in this regard is taken as showing these dimensions not to be critical to Susumu so that the ordinary skilled artisan could choose the dimensions which give the most conveniently sized apparatus for their purposes. No unexpected results are seen in a manner commensurate in scope with the instant claim 5 and the cited prior art for these dimensions. Paragraph [0019] of the DETAILED DESCRIPTION of Susumu show that his rollers are the ceramic of the instant claim 6. Column 6, lines 38-40 of Haldankar falls within the scope of the instant claim 8. The acrylic polymers will necessarily have monomeric residues falling within the scope of the instant claim 10 since such polymerizations never go to completion by definition of "degree of polymerization" in real polymerizations. It is not seen that any of the components of the references are excluded by "foreign substance" for the reasons discussed above. The printing or coating of the black compositions of Haldankar will give "black stripes" of the instant claims 12 and 14.

7. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick D. Niland
Primary Examiner
Art Unit 1714